

**GEOTECHNICAL ENGINEERING BUREAU  
SOIL SURVEY REPORT CHECKLIST**

**PROJECT** \_\_\_\_\_ **DATE** \_\_\_\_\_ **ENGINEER** \_\_\_\_\_

**1. EARTHWORK**

- ☐ If poor Class IIIC2 or worse soils are found at grade in cut sections, is extra graded aggregate base set up? Is lime or cement stabilization needed?
- ☐ Specify that Class IIIC2 and worse soils which will be excavated from cut sections not be placed within 3 feet of subgrade. Also need special provision, Section 205 for this requirement.
- ☐ If removal of poor soils is required, is a removal detail included? Also, have you specified what should be used as replacement material, and what should be done with removed material?
- ☐ If good Class II B3 or better soils are readily available on Coastal Plain projects, have you set up a 12-inch layer at subgrade? Special provision Section 209 is needed for this requirement.
- ☐ On sections with cuts and/or low fills (3' or less), if the in-place moisture of the soils 1 to 3 feet below subgrade is significantly above optimum moisture (>4 to 5%), have you set up removal or drying out and replacement of the wet soils?
- ☐ For fills and/or cuts higher than 35± feet, is the berm detail referenced and enclosed?
- ☐ Have any proposed slopes steeper than 2:1 in either soil or rock been investigated and addressed?

**II. GROUNDWATER**

- ☐ If groundwater was found above grade in cuts, or within 1 to 2 feet of grade in fills, have underdrains been set up? Remember to include correct underdrain detail.
- ☐ If high groundwater was found in cuts, will the special slope drain detail be needed to prevent slope sloughing? Special provision Section 572 is needed for this.
- ☐ For high groundwater in cuts, will additional graded aggregate base be needed in the pavement section for stability?
- ☐ If the project crosses a pond, lake, swamp, or other wet areas, make sure that some soil samples were taken from the bottom for classification to see if any removal will be required.
- ☐ Is granular or rock embankment needed to mat into any inundated areas? Is special provision 208 needed? For fills of 4 feet and less, consider placing geogrid under granular embankment. Geogrid may also be used in the bottom of inundated removal trenches.
- ☐ On Coastal plain projects with low fills in areas of high groundwater or low wet areas, consider placing one layer of low strength filter fabric under the fills.

**III. PAVEMENT DESIGN**

- ☐ For projects in the Piedmont region using graded aggregate base, is a minimum recommended base thickness set up?
- ☐ Have the options for acceptable base materials been listed?
- ☐ Have you checked adjacent projects to see if the soil support value is consistent with this project?
- ☐ Will lime or cement stabilization of subgrade soils be needed?

**IV. MISCELLANEOUS**

- ☐ For soil surveys at bridge approaches, have you included copies of the endbent borings?
- ☐ Is a waiting period needed before approach slabs are constructed? (for projects that include bridges)

**IV. DETAILS AND SKETCHES**

- ☐ Removal detail
- ☐ Berm detail for cuts or fills
- ☐ Surcharge and/or filter fabric details
- ☐ Benching detail
- ☐ Underdrain detail
- ☐ Serrated slopes
- ☐ Steep rock cuts
- ☐ Project location sketch
- ☐ Corrosion chart
- ☐ Slope drainage detail